Bicycling in MICHIGAN



Population: 9,897,264

Total annual economic impact of bicycling

\$668 million



4.69







Bicycling retail revenue

\$63 million

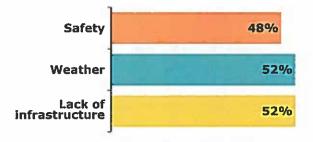
Total annual spending associated with bicycling events and vacations in Michigan

\$38 million

People employed by bicycling industry: 796



Key barriers to bicycling



44%

39%

28%

4%

Residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure

Households that reported that someone in their home used a bike for transportation in the last year

Bicyclists who commute by bicycle at least twice a week

Residents who participated in a bicycling event or bicycleoriented vacation in Michigan in the past year

Top primary bicycle types











This infographic provides a one-page summary of bicycling in the state of Michigan based on information gathered by BBC Research & Consulting and R. Neuner Consulting for the Michigan Department of Transportation (MDOT) as part of the first phase of a two-phase study on the economic benefits of bicycling in Michigan. The infographic is accompanied by a report providing information on the state of Michigan and the data sources and methodology used for the study. A household survey was conducted with Michigan residents, which gathered the following information shown on the infographic:

- Annual spending associated with bicycling events and vacations;
- Key barriers to bicycling;
- Percent of residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure;
- Percent of bicyclists who commute by bicycle at least twice a week;
- Percent of residents who participated in a bicycling event in Michigan In the past year; and
- Primary types of bicycles used by residents.

- Population provided by the U.S. Census Bureau 2012 American Community Survey;
- Miles of existing infrastructure gathered from interviews with local officials during the case study process;
- Bicycle Friendly CommunitySM Rating = a rating based on a number of metrics related to bicycling support and participation from the League of American Bicyclists;
- Households that reported that someone in their home used a bicycle for transportation in the last year from the Attitudes & Perceptions of Transportation in Michigan: A 2013 Survey of Michigan Adults (http://www.michigan.gov/documents/mdot/MDOT_2013_AP_SurveyReport_439065_7.pdf).
- Bicycling retail revenue based on the three-year average annual revenue of bicycle retailers in Michigan reported in Dun & Bradstreet;
- People employed by bicycling industry based on the three year annual employment averages for retail bicycle shops and bicycle manufactures located in Michigan as reported in Dun & Bradstreet;
- Total annual impact of bicycling calculated from the following components:
 - Total household retail spending on bicycling reported by Michigan residents in the household survey (\$175 million);
 - The total household spending on bicycle events and vacations as reported by Michigan residents in the household survey (\$38 million);
 - The average three-year annual revenues of bicycle-related manufactures in Michigan as reported in Dun & Bradstreet (\$11 million);
 - The avoided health care costs due to physical activity from bicycling based on (\$256 million):
 - The statewide rates of hospitalization for stroke and heart disease from the United States Centers for Disease Control;
 - The proportion of heart disease and stroke due to physical inactivity from the World Health Organization;
 - The proportion of residents who are physical active using their bicycle from the household survey; and
 - The average cost of hospitalization for stroke and heart disease from the Michigan Department of Community Health.
 - The avoided costs of absenteeism for Michigan employees due to bicycling based on (\$187 million):
 - The proportion of residents who are physical active using their bicycle from the household survey;
 - The cost of absenteeism per day from the Journal of Occupational and Environmental Medicine: 1 and
 - The number of days per year of avoided absenteeism due to cycling from the London School of Economics.²

¹ The Health and Productivity Cost Burden of the "Top 10" Physical and Mental Health Conditions Affecting Six Large U.S. Employers in 1999, by Dr. Ron Z. Goetzel, et al.

² The British Cycling Economy Gross Cycling Product Report London School of Economics

Bicycling in HOLLAND



Population: 33,307

Miles of existing infrastructure: 17

"[People] move here because of the sidepaths, and ... buy bikes so they can get to Evergreen Commons, to the library, to the beach, get exercise, to have fun." - Laura Harris, Cross County Cycle

Residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure

Bicycling retail revenue

Bicyclists who bike at least twice a week

\$557,000

Total annual spending associated with

bicycling events and vacations in Michigan

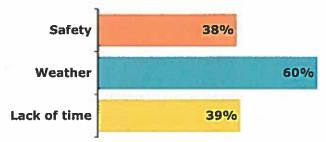
Bicyclists who commute by bicycle at least twice a week

Residents who participated in a bicycling event or bicycleoriented vacation in Michigan in the past year

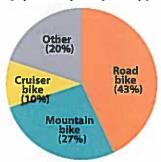


People employed by bicycling industry: 29

Key barriers to bicycling



Top primary bicycle types



Total annual economic impact of bicycling \$6.4 million

Study funded by **EMDOT**

This infographic provides a one-page summary of bicycling within Holland based on information gathered by BBC Research & Consulting and R. Neuner Consulting for the Michigan Department of Transportation (MDOT) as part of the first phase of a two-phase study on the economic benefits of bicycling in Michigan. The infographic is accompanied by a case study report on Holland as well as a report providing information on the state of Michigan and the data sources and methodology used for the study. A household survey was conducted with residents in Holland, which gathered the following information shown on the infographic:

- Annual spending associated with bicycling events and vacations;
- Key barriers to bicycling;
- Percent of residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure;
- Percent of bicyclists who bike at least twice a week;
- Percent of bicyclists who commute by bicycle at least twice a week;
- Percent of residents who participated in a bicycling event in Michigan in the past year; and
- Primary types of bicycles used by residents.

- Population provided by the U.S. Census Bureau 2012 American Community Survey;
- Miles of existing infrastructure gathered from interviews with local officials during the case study process;
- Bicycle Friendly CommunitySM Rating a rating based on a number of metrics related to bicycling support and participation from the League of American Bicyclists;
- Bicycling retail revenue based on the three-year average annual revenue of bicycle retailers in the City of Holland reported in Dun & Bradstreet;
- People employed by bicycling industry based on the three year annual employment averages for retail bicycle shops and bicycle manufactures located in Holland as reported in Dun & Bradstreet;
- Total annual impact of bicycling calculated from the following components:
 - Total household retail spending on bicycling reported by Holland residents in the household survey (\$1.1 million);
 - The total household spending on bicycle events and vacations as reported by Holland residents in the household survey (\$557,000);
 - The average three-year annual revenues of bicycle-related manufactures in Holland as reported in Dun & Bradstreet (\$410,000;
 - The avoided health care costs due to physical activity from bicycling based on (\$2.5 million):
 - The statewide rates of hospitalization for stroke and heart disease from the United States Centers for Disease Control;
 - The proportion of heart disease and stroke due to physical inactivity from the World Health Organization;
 - The proportion of residents who are physical active using their bicycle from the household survey; and
 - The average cost of hospitalization for stroke and heart disease from the Michigan Department of Community Health.
 - > The avoided costs of absenteeism for Holland employees due to bicycling based on (\$1.8 million):
 - The proportion of residents who are physical active using their bicycle from the household survey:
 - The cost of absenteeism per day from the Journal of Occupational and Environmental Medicine;¹ and
 - The number of days per year of avoided absenteeism due to cycling from the London School of Economics.²

¹ The Health and Productivity Cost Burden of the "Top 10" Physical and Mental Health Conditions Affecting Six Large U.S. Employers in 1999, by Dr. Ron Z. Goetzel, et al.

² The British Cycling Economy Gross Cycling Product Report. London School of Economics

Bicycling in ANN ARBOR



Population: 114,725

Miles of existing infrastructure: 71

"People live in a place like Ann Arbor because it's bike-friendly." - Erica Briggs-Whitacre, Washtenaw Biking and Walking Coalition



Bicycling retail revenue

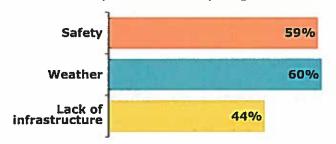
Total annual spending associated with bicycling events and vacations in Michigan

\$3.4 million

People employed by bicycling industry: 39



Key barriers to bicycling



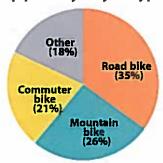
Residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure

Bicyclists who bike at least twice a week

Bicyclists who commute by bicycle at least twice a week

Residents who participated in a bicycling event or bicycleoriented vacation in Michigan in the past year

Top primary bicycle types



Total annual economic impact of bicycling \$25.4 million

Study funded by CMDOT

This infographic provides a one-page summary of bicycling within Ann Arbor based on information gathered by BBC Research & Consulting and R. Neuner Consulting for the Michigan Department of Transportation (MDOT) as part of the first phase of a two-phase study on the economic benefits of bicycling in Michigan. The infographic is accompanied by a case study report on Ann Arbor as well as a report providing information on the state of Michigan and the data sources and methodology used for the study. A household survey was conducted with residents in Ann Arbor, which gathered the following information shown on the infographic:

- Annual spending associated with bicycling events and vacations;
- Key barriers to bicycling;
- Percent of residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure;
- Percent of bicy clists who bike at least twice a week;
- Percent of bicyclists who commute by bicycle at least twice a week;
- Percent of residents who participated in a bicycling event in Michigan in the past year; and
- Primary types of bicycles used by residents.

- Population provided by the U.S. Census Bureau 2012 American Community Survey;
- Miles of existing infrastructure gathered from interviews with local officials during the case study process;
- Bicycle Friendly Community^{5M} Rating a rating based on a number of metrics related to bicycling support and participation from the League of American Bicyclists;
- Bicycling retail revenue based on the three-year average annual revenue of bicycle retailers in the City of Ann Arbor reported in Dun & Bradstreet;
- People employed by bicycling industry based on the three year annual employment averages for retail bicycle shops and bicycle manufactures located in Ann Arbor as reported in Dun & Bradstreet;
- Total annual impact of bicycling calculated from the following components:
 - Total household retail spending on bicycling reported by Ann Arbor residents in the household survey (\$9.1 million);
 - The total household spending on bicycle events and vacations as reported by Ann Arbor residents in the household survey (\$3.4 million);
 - The average three-year annual revenues of bicycle-related manufactures in Ann Arbor as reported in Dun & Bradstreet (\$0);
 - The avoided costs due to physical activity from bicycling based on (\$7.2 million):
 - The statewide rates of hospitalization for stroke and heart disease from the United States Centers for Disease Control;
 - The proportion of heart disease and stroke due to physical inactivity from the World Health Organization;
 - The proportion of residents who are physical active using their bicycle from the household survey; and
 - The average cost of hospitalization for stroke and heart disease from the Michigan Department of Community Health.
 - > The avoided costs of absenteeism for Ann Arbor employees due to bicycling based on (\$5.7 million):
 - The proportion of residents who are physical active using their bicycle from the household survey;
 - The cost of absenteeism per day from the Journal of Occupational and Environmental Medicine;¹ and
 - The number of days per year of avoided absenteeism due to cycling from the London School of Economics.²

¹ The Health and Productivity Cost Burden of the "Top 10" Physical and Mental Health Conditions Affecting Six Large U.S. Employers in 1999, by Dr. Ron Z. Goetzel, et al.

² The British Cycling Economy Gross Cycling Product Report. London School of Economics

Bicycling in GRAND RAPIDS



Population: 189,340

Miles of existing infrastructure: 42

"Riding a bike isn't just about getting somewhere and saving gas...From a local economic perspective, there's a serious trickle-down effect."

- Matt Ruiter, Velocity Cycles



Bicycling retail revenue

\$1.7 million

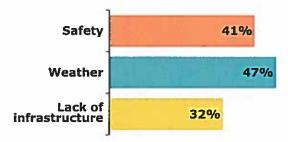
Total annual spending associated with bicycling events and vacations in Michigan

\$4.3 million

People employed by bicycling industry: 32



Key barriers to bicycling



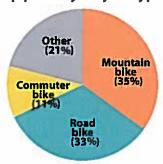
Residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure

Bicyclists who bike at least twice a week

Bicyclists who commute by bicycle at least twice a week

Residents who participated in a bicycling event or bicycleoriented vacation in Michigan in the past year

Top primary bicycle types



Total annual economic impact of bicycling \$39.1 million

Study funded by MDOT

This infographic provides a one-page snapshot of bicycling within Grand Rapids based on Information gathered by BBC Research & Consulting and R. Neuner Consulting for the Michigan Department of Transportation (MDOT) as part of the first phase of a two-phase study on the economic benefits of bicycling in Michigan. The infographic is accompanied by a case study report on Grand Rapids as well as a report providing information on the state of Michigan and the data sources and methodology used for the study. A household survey was conducted with residents in Grand Rapids, which gathered the following information shown on the infographic:

- Annual spending associated with bicycling events and vacations;
- Key barriers to bicycling;
- Percent of residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure;
- Percent of bicyclists who bike at least twice a week;
- Percent of bicyclists who commute by bicycle at least twice a week;
- Percent of residents who participated in a bicycling event in Michigan in the past year; and
- Primary types of bicycles used by residents.

- Population provided by the U.S. Census Bureau 2012 American Community Survey;
- Miles of existing infrastructure gathered from interviews with local officials during the case study process;
- Bicycle Friendly Community^{5M} Rating a rating based on a number of metrics related to bicycling support and participation from the League of American Bicyclists;
- Bicycling retail revenue based on the three-year average annual revenue of bicycle retailers in the City of Grand Rapids reported in Dun & Bradstreet;
- People employed by bicycling industry based on the three year annual employment averages for retail bicycle shops and bicycle manufactures located in Grand Rapids as reported in Dun & Bradstreet;
- Total annual impact of bicycling calculated from the following components:
 - Total household retail spending on bicycling reported by Grand Rapids residents in the household survey (\$8.3 million);
 - The total household spending on bicycle events and vacations as reported by Grand Rapids residents in the household survey (\$4.3 million);
 - The average three-year annual revenues of bicycle-related manufactures in Grand Rapids as reported in Dun & Bradstreet (\$2.6 million);
 - The avoided health care costs due to physical activity from bicycling based on (\$13.5 million):
 - The statewide rates of hospitalization for stroke and heart disease from the United States Centers for Disease Control;
 - The proportion of heart disease and stroke due to physical inactivity from the World Health Organization;
 - The proportion of residents who are physical active using their bicycle from the household survey; and
 - The average cost of hospitalization for stroke and heart disease from the Michigan Department of Community Health.
 - The avoided costs of absenteeism for Grand Rapids employees due to bicycling based on (\$10.3 million):
 - The proportion of residents who are physical active using their bicycle from the household survey;
 - The cost of absenteeism per day from the Journal of Occupational and Environmental Medicine;¹ and
 - The number of days per year of avoided absenteeism due to cycling from the London School of Economics.²

¹ The Health and Productivity Cost Burden of the "Top 10" Physical and Mental Health Conditions Affecting Six Large U.S. Employers in 1999, by Dr. Ron Z. Goetzel, et al.

² The British Cycling Economy Gross Cycling Product Report, London School of Economics

Bicycling in Two DETROIT Neighborhoods

(Southwest Detroit and Conner Creek Greenway Corridors)



Population: 162,998

"Bikes give people an option to get to work and get around."

- Heather Nugen, Back Alley Bikes and the Hub of Detroit

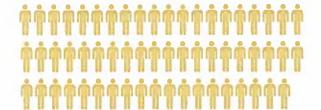
"If we can bring people back here, that's important. Putting people on bikes is a way to do that. They see the architecture, the history, and the potential we have. And they want to come back." - Kelli Kavanaugh, Wheelhouse Detroit

Bicycling manufacturing revenue \$5.2 million

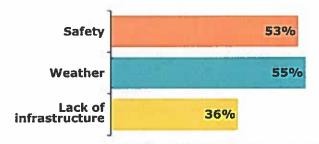
Total annual spending associated with bicycling events and vacations in Michigan

\$1.6 million

People employed by bicycling industry: 59



Key barriers to bicycling



Bicyclists who bike at least twice a week

Bicyclists who commute by bicycle at least twice a week

Residents who place an annual value of at least \$100 on the ability

to use bicycle infrastructure

Residents who participated in a bicycling event or bicycleoriented vacation in Michigan in the past year

Top primary bicycle types



Total annual economic impact of bicycling \$20.7 million



This infographic provides a one-page summary of bicycling within two Detroit neighborhoods – Southwest Detroit and the Conner Creek Greenway Corridor¹ – based on information gathered by BBC Research & Consulting and R. Neuner Consulting for the Michigan Department of Transportation (MDOT) as part of the first phase of a two-phase study on the economic benefits of bicycling in Michigan. The infographic is accompanied by a case study report on the two Detroit neighborhoods as well as a report providing information on the state of Michigan and the data sources and methodology used for the study. A household survey was conducted with residents in the two Detroit neighborhoods, which gathered the following information shown on the infographic:

- Annual spending associated with bicycling events and vacations;
- Key barriers to bicycling;
- Percent of residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure;
- Percent of bicyclists who bike at least twice a week;
- Percent of bicyclists who commute by bicycle at least twice a week;
- Percent of residents who participated in a bicycling event in Michigan in the past year; and
- Primary types of bicycles used by residents.

- Population provided by the U.S. Census Bureau 2012 American Community Survey;
- Miles of existing infrastructure gathered from interviews with local officials during the case study process;
- Bicycle Friendly CommunitySM Rating a rating based on a number of metrics related to bicycling support and participation from the League of American Bicyclists;
- Bicycling retail revenue based on the three-year average annual revenue of bicycle retailers in the two Detroit neighborhoods reported in Dun & Bradstreet;
- People employed by bicycling industry based on the three year annual employment averages for retail bicycle shops and bicycle manufactures located in the two Detroit neighborhoods as reported in Dun & Bradstreet;
- Total annual impact of bicycling calculated from the following components:
 - Total household retail spending on bicycling reported by residents of the two Detroit neighborhoods in the household survey (\$3.5 million);
 - The total household spending on bicycle events and vacations as reported by residents of the two Detroit neighborhoods in the household survey (\$1.6 million);
 - > The average three-year annual revenues of bicycle-related manufactures in the two Detroit neighborhoods as reported in Dun & Bradstreet (\$5.2 million);
 - The avoided health care costs due to physical activity from bicycling based on (\$6.5 million):
 - The statewide rates of hospitalization for stroke and heart disease from the United States Centers for Disease Control;
 - The proportion of heart disease and stroke due to physical inactivity from the World Health Organization;
 - The proportion of residents who are physical active using their bicycle from the household survey;
 and
 - The average cost of hospitalization for stroke and heart disease from the Michigan Department of Community Health.
 - The avoided costs of absenteeism for employees in the two Detroit neighborhoods due to bicycling based on (\$3.9 million):
 - The proportion of residents who are physical active using their bicycle from the household survey;
 - The cost of absenteeism per day from the Journal of Occupational and Environmental Medicine;²
 - The number of days per year of avoided absenteeism due to cycling from the London School of Economics.³

¹ Southwest Detroit is defined as ZIP codes 48201, 48208, 48209 and 48216. The Conner Creek Greenway Corridor is defined as ZIP codes 48213, 48214, 48215 and 48234. This study combines the two neighborhoods into one case study community.

² The Health and Productivity Cost Burden of the "Top 10" Physical and Mental Health Conditions Affecting Six Large U.S. Employers in 1999, by Dr. Ron Z. Goetzel, et al.

³ The British Cycling Economy Gross Cycling Product Report. London School of Economics

Bicycling in TRAVERSE CITY



Population: 14,702

"Bicycling is becoming more of a transportation option for more and more people in Traverse City." - Matt McCauley, Northwest Michigan Council of Governments



Bicycling retail revenue \$3.3 million

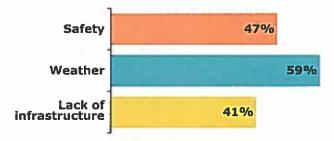
Total annual spending associated with bicycling events and vacations in Michigan

\$765,000

People employed by bicycling industry: 41



Key barriers to bicycling



559

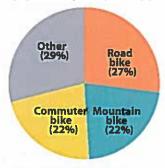
Residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure

Bicyclists who bike at least twice a week

Bicyclists who commute by bicycle at least twice a week

Residents who participated in a bicycling event or bicycleoriented vacation in Michigan in the past year

Top primary bicycle types



Total annual economic impact of bicycling \$5.5 million

Study funded by CMIDOT

This infographic provides a one-page snapshot of bicycling within Traverse City based on information gathered by BBC Research & Consulting and R. Neuner Consulting for the Michigan Department of Transportation (MDOT) as part of the first phase of a two-phase study on the economic benefits of bicycling in Michigan. The infographic is accompanied by a case study report on Traverse City as well as a report providing information on the state of Michigan and the data sources and methodology used for the study. A household survey was conducted with residents in Traverse City, which gathered the following information shown on the infographic:

- Annual spending associated with bicycling events and vacations;
- Key barriers to bicycling;
- Percent of residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure;
- Percent of bicyclists who bike at least twice a week;
- Percent of bicyclists who commute by bicycle at least twice a week;
- Percent of residents who participated in a bicycling event in Michigan in the past year; and
- Primary types of bicycles used by residents.

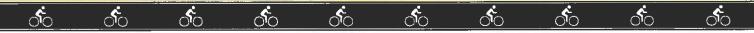
- Population provided by the U.S. Census Bureau 2012 American Community Survey;
- Miles of existing infrastructure gathered from interviews with local officials during the case study process;
- Bicycle Friendly Community^{5M} Rating a rating based on a number of metrics related to bicycling support and participation from the League of American Bicyclists;
- Bicycling retail revenue based on the three-year average annual revenue of bicycle retailers in Traverse City reported in Dun & Bradstreet;
- People employed by bicycling industry based on the three year annual employment averages for retail bicycle shops and bicycle manufactures located in Traverse City as reported in Dun & Bradstreet;
- Total annual impact of bicycling calculated from the following components:
 - > Total household retail spending on bicycling reported by Traverse City residents in the household survey (\$1.8 million);
 - The total household spending on bicycle events and vacations as reported by Traverse City residents in the household survey (\$765,000);
 - > The average three-year annual revenues of bicycle-related manufactures in Traverse City as reported in Dun & Bradstreet (\$0);
 - The avoided health care costs due to physical activity from bicycling based on (\$1.6 million):
 - The statewide rates of hospitalization for stroke and heart disease from the United States Centers for Disease Control;
 - The proportion of heart disease and stroke due to physical inactivity from the World Health Organization;
 - The proportion of residents who are physical active using their bicycle from the household survey; and
 - The average cost of hospitalization for stroke and heart disease from the Michigan Department of Community Health.
 - The avoided costs of absenteeism for Traverse City employees due to bicycling based on (\$1.3 million):
 - The proportion of residents who are physical active using their bicycle from the household survey:
 - The cost of absenteeism per day from the Journal of Occupational and Environmental Medicine;¹ and
 - The number of days per year of avoided absenteeism due to cycling from the London School
 of Economics.²

¹ The Health and Productivity Cost Burden of the "Top 10" Physical and Mental Health Conditions Affecting Six Large U.S. Employers in 1999, by Dr. Ron Z. Goetzel, et al.

² The British Cycling Economy Gross Cycling Product Report. London School of Economics

the economic impacts of

BICYCLE TOURISM IN MICHIGAN



The total economic impact of organized bicycling events in 2014 was

\$21.9 million

GENERAL FINDINGS

The average economic impact of self-supported touring bicyclists per trip:

\$760



69%



of out-of-state self-supported touring bicyclists reported using US Bicycle Routes 20 or 35

CASE STUDY EVENTS

Apple Cider Century

Total economic impact:

\$1.94 million

Dalmac

out-of-state participants traveled from a non-neighboring state

Iceman Cometh Challenge

participants traveled from:

different states and **2** countries

Michigander

Highest average expenditures per participant of the six case study events



were non-local participants



participants

in 2014

For more information contact Josh DeBruyn, MDOT Bicycle and Pedestrian Coordinator at debruynj@michigan.gov

This study was made possible through the Federal Highway Administration State Planning and Research Program administered by the Michigan Department of Transportation.



This infographic provides a one-page summary of bicycling in the state of Michigan based on information gathered by BBC Research & Consulting and R. Neuner Consulting for the Michigan Department of Transportation (MDOT) as part of the second phase of a two-phase study on the economic benefits of bicycling events in Michigan. The infographic is accompanied by a report providing information on the state of Michigan and the data sources and methodology used for the study. As part of the study, the team surveyed participants in organized bicycling events throughout the state of Michigan about their spending habits. Self-supported touring bicyclists (bicyclists who do not rely on motor vehicles to carry their gear and provisions while travelling) were also asked to estimate their spending habits while in the state of Michigan. Survey respondents were asked to estimate their spending in the following categories:

- Lodging (e.g. hotels, campgrounds, cottages);
- Restaurants and bars:
- Groceries (i.e. food and beverage not at restaurants and bars);
- Non-food shopping (e.g. clothing, souvenirs, etc.);
- Non-bicycling entertainment (e.g. amusement park, movie theater, etc.);
- Bicycles, components, repairs, and accessories; and
- Transportation (e.g. airfare, gas, public transportation, car rental or parking).

Below is a description of the data sources for the "General Findings" section of the infographic:

- Total economic impact of organized bicycling events Gathered from survey data of over 3,400 participants in organized bicycling events in Michigan;
- Economic impact of the average self-supported touring bicyclist Gathered from survey data of over 350 self-supported touring bicyclists in the state of Michigan;
- Percentage of self-supported touring bicyclists using U.S. Bicycle Routes Self-supported touring bicyclist survey data.

Below is a description of the data sources for the "Case Study Events" section of the Infographic, All data were collected via physical and online surveys unless otherwise stated:

- Apple Cider Century \$1.94 million dollars in total economic impact is calculated from the direct spending of out-of-state participants to the 2014 ACC;
- Michigander \$742 is the estimated average expenditure for all 2014 Michigander participants. This average is higher than the other five case study events;
- DALMAC An estimated 36 percent of out-of-state participants to DALMAC came from states further away than Illinois, Ohio, Wisconsin, and Indiana;
- Ore to Shore 97 percent of participants in the 2014 Ore to Shore were non-local participants (i.e., travelled to the event from more than 50 miles away);
- Iceman Cometh According to event registration logs, participants in the 2014 Iceman Cometh Challenge travelled to Michigan from 36 different states and two countries (Canada and Australia);
- Tour de Troit More than 7,500 individuals participated in the 2014 Tour de Troit, according to event registration information.

For information on U.S. Bicycles Routes in Michigan go to: www.michigan.gov/mdot-biking